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ABSTRACT

A study assessed the equality of women managers in 11 of the largest state agencies in Texas. It also investigated the perceptions of men and women managers concerning a variety of work related issues in Texas state government. A stratified random sample of 25 percent of all managers was drawn, and 1,844 responses, representing a 55.5% response rate, were analyzed. Results addressed perceptual differences of male and female managers regarding job characteristics, communication in the organization, outcome factors, development needs, and demographics. Findings revealed fewer female managers overall and significantly fewer females in middle and top management positions. Although female managers felt their job objectives were clear and in writing, they indicated they receive more information from the grapevine than they prefer, and they do not receive sufficient downward and upward communication through channels. Female managers were less satisfied with their participation in decision making and chances for advancement, and they did not feel they received sufficient management training before assuming their job responsibilities. (Appendixes include a list of 21 references and 6 data tables.) (YLB)

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GENDER DIFFERENCES AND PUBLIC SECTOR MANAGERS:

WOMEN'S PERCEPTIONS OF EQUALITY IN STATE GOVERNMENT

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Abstract

This study assessed the equality of women managers in 11 of the largest state agencies in Texas as well as investigated the perceptions of men and women managers concerning a variety of work related issues in Texas state government. A stratified random sample of 25% of all managers was drawn, and over 1,800 responses were analyzed. Results addressed perceptual differences of male and female managers regarding job characteristics, communication in the organization, outcome factors (i.e., satisfaction, commitment), development needs, and demographics. Findings revealed that there are not only fewer female managers overall but also there are significantly fewer females in middle and top management positions. While female managers feel their job objectives are clear and in writing, they indicate they receive more information from the grapevine than they prefer, and they do not receive sufficient downward and upward communication through channels. Female managers are less satisfied with their participation in decison-making and chances for advancement, and they do not feel they received sufficient management training before assuming their job responsibilities.

GENDER DIFFERENCES AND PUBLIC SECTOR MANAGERS:

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INTRODUCTION

In 1967 Herman Kahn and Anthony Wiener published a thought provoking book sponsored by the Hudson Institute entitled The Year 2000 in which they included projections about the American work force. In a chapter of the book entitled "Some Surprise-Free Economic Projections," Kahn and Weiner (1967) predicted the following:

> The estimated increase in the labor force participation rate derives from an increase in the participation of the female population in the labor force. The female participation rate is projected to approximately 42 per cent in year 2000, as against (the) 1964 experience of 37 per cent. (p. 171)

Approximately 20 years later those projections had been met and exceeded. A joint publication of the U.S. Department of Labor and the U.S. Department of Education entitled The Bottom Line (1988) quoted a current statement from the Hudson Institute. By 1985 women accounted for 44% of the labor force, and projections indicated that 64% of the 25 million net new workers entering the labor force from 1985 to 2000 would be female.

While these changes in the demographic makeup of the work force are dramatic, the acceptance of women as equals has not kept pace. One of the areas of greatest inequality is the involvement of women in managerial positions. Some have referred to this pervasive vertical and horizontal job segregation as a virtually impenetrable "glass ceiling" (Hymowitz & Schellhardt, 1986). E. Pendleton James, former head of personnel for the Reagan White House, recognized the limited role of women in decision making when he makes reference to "BOGSAT" -- a "Bunch Of Guys Sitting Around a Table" making decisions (Johnson, 1987). Private sector studies estimate that approximately 30% of managers are female, but only 1% of these women managers are executives (Cowan, 1989). However,

Korn-Ferry International projects that the proportion of women attaining the most coveted top management positions will rise to 16% by the year 2000 (Cowan, 1989). To be realized, this prediction implies much more rapid change in the next 10 years than has occurred in the past 20 years. Current research indicates that women are extremely underrepreseted in executive and middle management ranks in virtually all public and private sector organizations (Hymowitz & Schellhardt, 1986; Whitcraft, 1988).

Women who tried to enter managerial ranks before the Civil Rights Act with Title VII passed in 1964 faced more overt barriers than they do today (McDonald, 1988). But even with Title VII outlawing employment discrimination, and twenty-five years of increasing numbers of educated women entering into management ranks, females today face more subtle forms of unequal treatment than they did in the past. A 1986 survey of high level Texas public administrators found that women are significantly more likely than men to have experienced or heard about a wide variety of discriminatory behaviors (Stanley, 1989a). From the responses of a random sample of 117 women and 130 men classified at grade 19 or above (of 21 pay grades), Stanley reported that the majority of female administrators are more likely to feel that they are excluded from important decision-making (53% women; 27% men) and are not given credit for their ideas (58% women; 30% men). In addition, Stanley reported that more women feel they are assigned demeaning or inappropriate tasks by superiors (35% women; 16% men), denied access to top administrators (22% women; 12% men) and denied performance appraisals (22% women; 10% men).

Stanley's findings are supported by a Gallup Poll survey conducted for the Wall Street Journal in 1984 of 722 executive women at vice-president level or higher (Rogan, 1984). This analysis of women top executives revealed:

80% agreed that there were disadvantages to being female in business
60% said their views were not respected as much as those of males
60% felt cut off from social conversations and activities among male colleagues

50% said male co-workers treated them differently
37% concurred they were judged on appearance and dress more than men
29% thought their personal lives were scrutinized more closely than men

A New York Times Poll on women's issues, conducted in June, 1989, reported similar findings based on interviews with 1,025 women and 472 men. In the first of a series of articles titled "Women's Lives: A Scorecard of Change," Belkin (1989) reported that 56% of women said American society has not changed enough to allow women to compete with men on an equal basis, and a comparable number of men (49%) held the same view. A second poll of 602 women conducted in July by the New York Times repeated the question of the most important problem facing women. Twenty-seven percet (27%) of the 1,025 women polled in June and 23% of the 602 women polled in July cited equality on the job as their most important problem. On the question of whether men still run everything and exclude women from important decisions, only 34% of men in the 45 to 65 year age group said they did, but 59% of women that age perceived that they were excluded (Dionne, 1989).

The reasons American women express for entering the work place have changed since the late 1960s. More so than before, women go to work out of necessity to make money rather than in search of extra money for luxury items. A 1970 Harris Poll reported that 23% of working women with full- and part-time jobs said they worked to support themselves, 18% were supporting their family, 49% said for extra money, and 9% for something interesting to do (Cowan, 1989). Nineteen years later, a New York Times Poll of a similar group of full- and part-time working women reported that 24% said they worked to support themselves, 36% to support their family, 27% for extra money, and 9% for something interesting to do (Cowan, 1989). Even though women are working today more out of necessity to support themselves and their families, they have made less progress in getting paid the same for their efforts as men as well as had difficulty breaking into certain careers. The ratio between women's median earnings as a percentage of

men's median earnings is seventy cents to the dollar today compared to sixty-two cents to the dollar in 1970 (Cowan, 1989).

Evidence of large discrepancies in wages for men and women was found in a 1984 survey of 200 state agencies in Texas. This study sought to identify which agencies had the highest annual increase in the number of women earning $25,000 or more annually. The highest increase was recorded by the Texas Department of Human Services (DHS), which had a total of 11,800 employees. Of the 9,000 women, or 77% of the DHS work force, only 84 women (1%) earned $25,000 or more annually. About 2,800 (33%) of the DHS work force were men, and 228 of the men (8%) earned $25,000 or more annually. DHA was presented with an award by the Governor of Texas for having the largest increase of women (a total of 14) promoted to managerial salary levels (Whitcraft, 1988).

Wage statistics do not fully capture the discrepancies referred to by Belkin (1989) as "female ghettos." These are enclaves occupied almost exclusively by women in otherwise integrated work places where women are given low-wage assignments and undesirable shifts. These "female ghettos" are also found in the public sector. A review of the salaries and occupations of full-time Texas state employees compared by gender showed that 49% of the employees were men and 51% were women, but 96% of the skilled crafts jobs were occupied by men while 92% of the administrative support occupations were held by women (Stanley, 1989b). While 75% of all paraprofessionals were women, 86% of the protective service occupations were held by men.

Similar patterns of underrepresentation in jobs with higher status and managerial wages are found in the field of higher education. In response to a request for information from a female member of the Board of Regents of the University of Texas (UT) System, the Chancellor reported that in the four years since the regent began pushing for more women in faculty and administrative jobs, the percentage of women among tenured faculty had changed very little, but

that the percentages of women in senior administrative jobs had increased considerably. In the four years from 1984 to 1988 the number of tenured women in the seven UT System academic institutions rose from 333 (13.4%) to 352 (13.7%), an increase of 0.4% of the total faculties. In the senior administrative positions, gains in the numbers of women varied widely by campuses. At UT Austin, women held 30.8% of senior administrative positions compared to 24.4% four years earlier. In the same time frame, UT El Paso increased from 27.9% to 37.9% of women in senior positions (Jones, 1989).

The generally accepted tenents of effective democratic government, representative bureaucracy, and merit based employment are inconsistant with pervasive gender inequality in the work place. Moreover, the dramatically changing demographic makeup of the work force requires that current and future management practices and organizational communication systems create more positive perceptions of gender equality in the public as well as the private sectors. Despite these demographic changes as well as state and federal legal provisions which prohibit inequality, gender discriminatory attitudes in employment, promotion, and remuneration still continue.

The present study was undertaken in an effort to better understand the perceptions of men and women managers regarding a variety of work related issues in state government in Texas. It is a comprehensive analysis, seeking to gain input from managers in the largest state agencies. More specifically, the purpose of the project was to evaluate the status of women managers in Texas state agencies as well as to compare the perceptions of women managers to those of male managers.

METHOD

In May and June of 1988 the 12 largest state agencies in Texas were contacted by way of the State Agency Coordinating Committee (SACC) in an effort to gain their cooperation in this project designed to assess managers'

perceptions of operations in the various state agencies. A liaison person was selected from each agency to work with the investigators in this project. Liaison persons were provided with a preliminary copy of the questionnaire, the purpose of the project was clarified, and responsibilities were discussed. The number of full-time equivalent employees and the management population of each of the agencies was determined and recorded (see Table 1).

Following meetings with individuals in the personnel or data processing divisions, a stratified random sample of 25% of executives, middle management, and first level supervisors was drawn in each agency. This was accomplished by first obtaining a complete list of all executives, middle managers, and first level supervisors. (This survey did not select for analysis non-supervisory personnel.) Some agencies had the names and titles of employees on their computers and were able to draw a random sample using the computer. For example, in the Texas Department of Highways and Transportation there were 44 executives, 544 middle managers, and 768 first level supervisors. A 25% stratified random sample within each level of management produced a sample of 11 executives, 136 middle managers, and 192 first level supervisors. Most agencies, however, had difficulty listing personnel within the three levels of management. These agencies simply identified supervisory or managerial personnel and drew a 25% random sample by hand, selecting every 4th person at the management level.

Almost every agency found it difficult to identify which titles in their agency fell within the three management levels of executive, middle management, and first level supervisor. Therefore, a page including examples of titles at each of the three levels of management was prepared by each liaison person to help respondents correctly identify their position in the agency. The following conceptual definitions were provided for each level of management, accompanied by examples of titles in that agency.

-- Executive - top management, usually of "Exempt" status
-- Middle Management - middle level manager whose primary job is to direct the work of supervisors or managers
-- First Level Supervisor - staff or line supervisors whose primary job is to direct the work of 2 or more persons who do not supervise anyone
-- Non-Supervisory Employee - employee who does not supervise anyone or who does some supervision, but this supervision is not his/her primary job responsibility (This category was included in an effort to identify individuals who were incorrectly selected in the sample. Any respondent who indicated s/he was a non-supervisory employee was eliminated from further analysis.)

The survey questionnaire was the product of a variety of drafts and discussions with representatives from each of the participating agencies. It contained 50 items and used a multiple-choice answer format. Items on the questionnaire addressed the perceptions of managers in 5 main areas:

1. Demographics
2. Job Characteristics
3. Communication in the Organization
4. Outcome Factors (e.g., satisfaction, commitment, productivity)
5. Development Needs of Managers

Seventeen items addressed job objectives and other job-related activities in Texas agencies. Eight items related to communication were adapted from questions on the ICA and OCD communication audits (Goldhaber & Rogers, 1979; Goldhaber, Dennis, Richetto, & Wiio, 1979). Ten outcome items concerning satisfaction, commitment, productivity, work group, and trust with superior were adapted from previously developed questionnaires (Downs, 1988; Mowday, Steers, & Porter, 1979; Smith, Kendall, & Hulin, 1969). Seven development needs items which related to human resource development were adapted from existent questionnaires (Hatfield & Huseman, 1983; Moore & Dutton, 1978). The eight demographic items addressed traditional demographic characteristis of employees.

The packet mailed to each participant in the survey included a cover letter signed by a top executive in the agency explaining the survey and assuring confidentiality, a sheet listing examples of titles at the three levels of management, the survey questionnaire, a Scan-Tron answer sheet, and a return envelope. After recording their answers on the Scan-Tron answer sheet,

respondents were asked to return just the answer sheet in the enclosed return envelope which was addressed to one of the primary investigators in the project. Participants did not write their name or personally identify themselves on the answer sheets.

Of the 12 largest state agencies invited to be part of this investigation, all but the Texas Department of Public Safety chose to participate. Table 1 lists the 11 agencies participating in the analysis and provides a summary of information about the sample. The first set of questionnaires was mailed July 12, 1988, and the last set was mailed August 10, 1988. By August 26, 1988 a total of 1,955 completed answer sheets had been returned, producing an overall response rate of 58.9%. Eight of the 11 agencies had a response rate of 63% or greater, and if the Texas Department of Mental Health and Mental Retardation (with a response rate of only 44.2%) was not included, the overall response rate would have increased to 68%. Even with the inclusion of the Texas Department of Mental Health and Mental Retardation, the 58.9% return is considered to be an acceptable response rate. The results of this analysis are indeed generalizable to state agencies in Texas.

Of the 1,955 returned questionnaires, 1,844 were completed correctly and returned by individuals who identified themselves as male or female. This analysis is based on these 1,844 responses which represents a 55.5% response rate. The overall results of this analysis are generalization to the managers in state agencies with a margin of error of approximately plus or minus 3% for proportional data (Eckhardt & Ermann, 1977).

RESULTS

Chi-square, phi coefficient, and analysis of variance tests were computed to determine if male and female managers differed in their responses to each of the items on the questionnaire. Because of the large number of respondents (N = 1,844), a rigorous level of significance was selected in an effort to

minimize Type II error. Those results which were statistically significant at $p < .02$ and were determined to be most meaningful are presented in the results which follow.

Demographic Results

Items 43 to 50 on the questionnaire assessed demographic characteristics of male and female managers in Texas state government. Table 1 and Table 2 present these results. Primary findings indicate:

1. Overall, 59% of managers in the 11 agencies investigated are male while 41% are female.

2. In 8 of the agencies, the majority of managers are male. Approximataely 90% or more of the managers in the Texas Department of Highways and Public Transportation, Texas Parks and Wildlife Department, and Texas Water Commission are male. Approximately 80% of the managers in the Texas Youth Commission and Texas Department of Corrections are male.

3. Only 3 agencies have more female managers than male managers. These agencies are the Texas Department of Mental Health and Mental Retardation (65% females), Texas Department of Human Services (62% females), and Texas Department of Health (52% females).

4. The large majority of female managers are first level supervisors (72%), while 27% are middle managers and only 1% are executives. Conversely, 51% of males are first level supervisors, 44% are middle managers, and 5% are executives. (Item 47)

5. The majority of male managers (82%) and female managers (75%) are anglo; however, proportionately more female managers are black (13%) compared to male managers (5%). Nine percent (9%) of male managers and 9% of female managers are hispanic. (Item 49)

6. An equal percentage of male and female managers hold graduate degrees (26%), while 38% of male managers have completed an undergraduate college degree compared to 30% of female managers. Eighteen (18%) of female managers have a high school degree or have not completed high school compared to 10% of male managers. (Item 48)

7. Proportionately more male managers have worked for their agencies 11 or more years (61%) compared to 49% of female managers. (Item 45)

8. Female managers are somewhat younger than male managers. Thirty-nine percent (39%) are 39 are younger compared to 31% of male managers, while 28% of female managers are 50 or older compared to 33% of male managers. (Item 44)

9. Proportionately more female managers work in field offices (72%) than male managers (63%). (Item 50)

Job Characteristics Results

Items 1 to 16 and 31 are questions which asked managers to indicate their perceptions regarding job objectives and other job related activities. Alpha reliability for this scale was .85. Table 3 presents the results for these items. Primary findings indicate:

1. Female managers indicate significantly higher scores than male managers on the following issues:
   -- my job objectives are in writing (Item 3)
   -- there is an agency record of the degree to which my job objectives are accomplished (Item 11)
   -- the program established to monitor job objectives requires an excessive amount of record keeping and paperwork (Item 13)
   -- my job objectives are written in such a way that measurable results can be identified (Item 6)

2. Male managers scored significantly higher scores than female managers on the following items:
   -- there are sufficient checkpoints and opportunities to meet with my immediate superior to review or adjust the objectives of my job (Item 5)
   -- top management in my agency supports and is committed to a form of management by objectives (Item 7)

3. Male and female managers did not differ significantly on the remaining items on the scale designed to measure job characteristics. Overall, these findings indicate male and female managers feel that:
   -- the objectives program in their agency is worthwhile, that their agency is objectives/results oriented, and that their job objectives are clear (Items 14, 10, 1)
   -- they understand how their job objectives relate to others in their agency, and that the accomplishment of their job objectives is a major factor considered in performance evaluation (Items 12, 16)
   -- job objectives are jointly determined with their immediate supervisor but that a clear action plan or timetable to accomplish the objectives has not been established (Items 2, 4)
   -- short-term objectives (one year or less) are established for their job but long-term objectives are not established (Items 8, 9)
   -- the approved annual objectives are not the basis for the development of the annual budget for their agency, and that the program established to monitor job objectives requires too much record keeping and paperwork (Items 15, 13)
   -- their performance is systematically evaluated at least once a year (Item 31)

Communication in the Organization Results

Items 17 to 22, 35 and 36 address communication concerns in state agencies. Alpha reliability for this scale was .66. Table 4 presents these results. Primary findings indicate:

1. Female managers, compared to male managers, indicate they receive significantly more information from informal channels (i.e., the "grapevine") than they prefer (Item 22)

2. Male managers scored significantly higher scores than female managers on the following items:
   -- downward communication through channels from top management to work personnel is good (Item 18)
   -- upward communication through channels from work personnel to top management is good (Item 19)

3. Male and female managers did not differ significantly on the remaining items on the scale designed to measure communication factors. Overall, these findings indicate male and female managers feel that:
   -- they have enough face-to-face communication with their immediate supervisor, and that communication with their immediate supervisor as well as other individuals in their agency is good (Items 17, 20, 21)
   -- the most prevalent communication problems in their agency are that information is not readily available and it reaches them too late (Item 35)
   -- job-related communication with individuals in other agencies occurs rather frequently. Approximately 20% indicate they communicate daily, and approximately 20% indicate they communicate several times a week. Approximately 37% indicate they communicate with other agencies once a month or less. (Item 36)

Outcome Factors Results

Items 24 to 30 and 32 to 34 address a variety of organizational outcomes. Alpha reliability for this scale was .80. Table 5 presents the results for these outcome factors. Primary findings indicate:

1. Male managers scored significantly higher scores than female managers on the following issues:
   -- I am satisfied with my participation in decision-making and the possibilities I have to influence matters concerning my job (Item 29)
   -- I am satisfied with my chances for promotion and advancement (Item 28)

2. Male and female managers did not differ significantly on the remaining items on the scale designed to measure outcome factors. Overall, these findings indicate male and female managers feel that:
   -- they are productive, and that their immediate superior would rate their productivity highly (Items 32, 33)
   -- there is a great deal of teamwork in their work group, and that the quality of work produced by the work group is good (Items 27, 34)
   -- they have a strong commitment and loyalty to their agency, and that they are satisfied with their job performance (Items 24, 25)
   -- they are satisfied with their immediate superior, and that they trust their immediate superior (Items 26, 30)

Development Needs Results

Items 23 and 37 to 42 are questions about development needs. Alpha reliability for this scale was .84. Table 6 presents the development needs results. Primary findings indicate:

1. Female managers indicate significantly different scores than male managers on the following issues:
   -- compared to males, female managers feel they did not receive sufficient management training for their present job before assuming their job responsibilities (Item 23)
   -- compared to males, female managers indicate they need more improvement in giving oral presentations (Item 37), leading group problem-solving meetings (Item 38), managing conflict between subordinates (Item 40), and handling subordinates' complaints (Item 42)

2. Male and female managers did not differ significantly on the remaining items related to development needs. Overall, these findings indicate the majority of male and female managers:
   -- need some or much improvement conducting performance appraisal interviews (Item 39)
   -- need very little or no improvement writing memos, reports, and letters (Item 41)

DISCUSSION AND CONCLUSIONS

This paper presented the findings of a survey of management practices in eleven of the largest state agencies in Texas. The results clearly support the perceptions found in other surveys that workplace inequalities based on gender differences do in fact still exist twenty-five years after the passage of Title VII (Belkin, 1989; Cowan, 1989; Dionne, 1989; Stanley, 1989a). In spite of the provisions of Title VII of the Civil Rights Act which outlaw employment discrimination, the results of the responses of 1,088 male and 756 female managers substantiate gender inequality in the areas of promotion and job segregation. Perceptions of female managers relating to specific job characteristics, organizational communication, outcome factors and development needs show significant differences compared to male managers.

Female managers in these eleven state agencies seem to have crashed into the invisible barrier known as the "glass ceiling" (Hymowitz and Schellhardt, 1986). While 72% of female managers hold positions as first level supervisors, only 28% are middle managers or executives. Conversely, male managers are more

equally distributed in the categories of middle managers and executives (49%) and first level supervisors (51%). In addition to not holding higher managerial positions, female managers are segregated. The majority are located in three agencies related to the delivery of human services: the Departments of Mental Health and Mental Retardation, Human Services, and Health. This finding confirms prior suggestions that women are not distributed throughout the workplace but are confined to "female ghettos" (Belkin, 1989). Conversely, male managers predominate in eight of the eleven agencies surveyed and are virtually segregated in the technical infrastructure agencies of Highways and Public Transportation, Parks and Wildlife, and the Water Commission.

The results of female managers' responses to questions regarding the characteristics of job related activities and objectives reflect the findings of previous studies which indicate women feel excluded from important decision-making and are denied access to top administrators (Belkin, 1989; Rogan, 1984; Stanley, 1989a). Females indicate that they perceive significantly more control and paper-reporting relate to their objectives than do male managers. Male managers indicate there were significantly more opportunities to meet face-to-face with their immediate superiors and to identify with the forms of management endorsed by their top superiors. Female managers receive signifcantly more information from "the grapevine" than they prefer and do not regard communication, either downward from top management or upward from subordinates, as forthcoming or relevant as do male managers. This finding supports the feelings of private sector women executives that they are cut off from social conversations and activities among male colleagues, and that they are treated differently (Rogan, 1984).

Satisfaction with participation in decision-making and with chances for promotion and advancement are significantly lower among female managers than with male managers in the present study. This finding also supports the results

of a recent polls of the general population of women and men relating to the extent to which American society has changed enough to allow women to compete with men on an equal basis and whether women feel equal on their jobs (Dionne, 1989). This poll found that a high proportion of women are dissatisfied with levels of equality in their work environments.

The pervasive perceptions of inequality which women managers in eleven Texas state agencies report are reflected in their responses to questions about developmental needs. Even though a very large proportion of women in this study demonstrated similar educational attainment compared to that of men, significantly more female managers felt they did not receive sufficient management training before assuming their job responsibilities. More specifically, women feel they needed more training to help them improve in giving oral presentations, leading problem-solving meetings, managing conflict, and handling complaints.

The present study confirmed that a caste system of men at the top and women lower down still prevails in the public sector in spite of increasing numbers of women in the work force. As the projections of rapid changes in work force demographics become reality, and as the American society enters a new millenium and a new century, continued research is required to document the changes in perceptions and practices that will eventually erase the gender inequality prevalent today. On an equal playing field women managers would expect to be treated the same as male managers with respect to job and promotion opportunities, accessibility to information, remuneration for work completed, and development opportunities. While inequalities in these areas still exist, despair is not the appropriate response. Instead, both women and men should recognize the challenge before us and strive even harder to remedy discriminatory attitudes and practices in an effort to not only provide equal opportunities for women but also create a more productive work force.

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Table 1
Agencies Surveyed

Agency	Management Population	Management Sample	Surveys Returned	% Returned	% Male in Agency	% Female in Agency
Texas Department of Highways and Public Transportation	1,356	339	286	84.4	96.7	3.3
Texas Employment Commission	668	167	150	89.8	57.9	42.1
Texas Department of Human Services	1,696	424	305	71.9	38.5	61.5
Texas Water Commission	192	48	33	68.9	87.5	12.5
Texas Parks and Wildlife Department	280	70	50	71.4	90.7	9.3
Texas Rehabilitation Commission	256	64	52	81.3	58.0	42.0
Texas Youth Commission	336	84	56	66.7	79.1	20.9
Texas Department of Mental Health and Mental Retardation	5,104	1,276	564	44.2	35.1	64.9
Texas Department of Health	840	210	124	59.0	47.9	52.1
Texas Education Agency	240	60	38	63.3	55.0	45.0
Texas Department of Corrections	2,320	580	297	51.2	79.5	20.5
TOTAL	**13,288**	**3,322**	**1,955**	**58.9**	**59.0**	**41.0**

Table 2
Demographics

	Male (N = 1088)	Female (N = 756)
44. Age		
29 or less	7%	7%
30 - 39	24%	32%
40 - 49	36%	33%
50 - 59	27%	22%
60 or Up	6%	6%
45. Agency Tenure		
1 year or less	3%	5%
2 - 4 years	12%	16%
5 - 7 years	13%	14%
8 - 10 years	11%	16%
11 years or more	61%	49%
46. How many Persons Do You Evaluate?		
0 persons	10%	15%
1 - 4 persons	27%	29%
5 - 8 persons	29%	24%
9 - 12 persons	14%	16%
13 or more	20%	16%
47. Management Level		
Executive	5%	1%
Middle Management	44%	27%
First Level Supervisor	51%	72%
48. Level of Education		
Less than High School	1%	4%
High School Graduate	9%	14%
Some College	26%	26%
Undergraduate Degree	38%	30%
Graduate Degree	26%	26%
49. Ethnic Identification		
Black	5%	13%
Hispanic	9%	9%
Anglo	82%	75%
Asian	1%	1%
Indian or Other	3%	2%
50. Office Location		
Central	37%	28%
Field	63%	72%

Table 3
Job Characteristics

Question	Sex	% Strongly Agree & Agree	% Neutral/ No Opinion	% Strongly Disagree & Disagree	Mean Score†
1. The objectives of my job are clear.	M	87%	4%	9%	4.10
	F	85%	4%	11%	4.06
2. My job objectives were jointly determined (i.e., discussed and negotiated) by me and my immediate supervisor in a face-to-face meeting.	M	58%	11%	31%	3.32
	F	55%	7%	38%	3.23
3. My job objectives are in writing.	M	73%	9%	18%	3.73**
	F	79%	7%	14%	3.92
4. A clear action plan (or timetable) with intermediate checkpoints is used to identify the time it will take to accomplish the various objectives of my job.	M	38%	19%	43%	2.90
	F	37%	16%	47%	2.86
5. There are sufficient checkpoints and opportunities to meet with my immediate superior to review or or adjust the objectives of my job.	M	69%	13%	18%	3.66**
	F	61%	11%	29%	3.40
6. My job objectives are written in such a way that measurable results can be identified.	M	53%	18%	29%	3.28*
	F	60%	13%	27%	3.41
7. Top management in my agency supports and is committed to a form of management by objectives.	M	60%	23%	17%	3.54*
	F	55%	23%	22%	3.41
8. Short-term objectives (i.e., one year or less) have been established for my job.	M	58%	16%	26%	3.36
	F	55%	17%	28%	3.33
9. Long-term objectives (i.e., longer than one year) have been established for my job.	M	44%	22%	34%	3.10
	F	42%	22%	36%	3.05

† "Strongly Agree" was coded "5" and "Strongly Disagree" was coded "1".
*Significant p<.02
** Significant p<.001

Table 3 (continued)
Job Characteristics

Question	Sex	% Strongly Agree & Agree	% Neutral/ No Opinion	% Strongly Disagree & Disagree	Mean Score†
10. My agency is very objectives/ results oriented.	M	60%	22%	18%	3.54
	F	59%	21%	20%	3.52
11. There is an agency record of the degree to which my job objectives are accomplished.	M	52%	27%	21%	3.38**
	F	61%	21%	18%	3.53
12. I understand how my job objectives relate to the job objectives of others in my agency.	M	70%	15%	15%	3.68
	F	70%	15%	15%	3.71
13. The program established to monitor job objectives requires an excessive amount of record keeping and paperwork.	M	44%	29%	27%	3.32**
	F	52%	26%	22%	3.51
14. The overall job objectives program is worthwhile.	M	63%	26%	11%	3.61
	F	63%	26%	11%	3.62
15. The approved annual objectives are the basis for the development of our annual budget in this agency.	M	37%	41%	22%	3.15
	F	32%	46%	22%	3.11
16. The accomplishment of my specific job objectives is a major factor considered in my performance evaluation.	M	72%	14%	14%	3.77
	F	75%	12%	13%	3.88

	Sex	% 3 or More a Year	% Twice a Year	% Once a Year	% Every 2 Years	% None
31. My immediate superior provides me with a systematic, scheduled evaluation or review of performance.	M	6%	9%	72%	4%	9%
	F	9%	10%	72%	3%	6%

† "Strongly Agree" was coded "5" and "Strongly Disagree" was coded "1".
** Significant p<.001

Table 4
Communication in the Organization

Question	Sex	% Strongly Agree & Agree	% Neutral/ No Opinion	% Strongly Disagree & Disagree	Mean Score†
17. I feel that I have enough face-to-face communication with my immediate superior.	M	80%	6%	14%	3.98
	F	75%	6%	19%	3.86
18. In my agency, downward communication through channels from top management to work personnel is good.	M	52%	13%	35%	3.15**
	F	40%	11%	49%	2.82
19. In my agency, upward communication through channels from work personnel to top management is good.	M	51%	17%	32%	3.19**
	F	42%	15%	43%	2.92
20. Communication between me and my immediate superior is good.	M	83%	7%	9%	4.09
	F	81%	7%	12%	4.00
21. Communication between me and individuals in my agency is good.	M	87%	8%	5%	4.03
	F	83%	9%	9%	3.94
22. I receive more job-related information from informal channels (i.e., the "grapevine") than I prefer.	M	34%	27%	39%	2.99**
	F	47%	20%	33%	3.22

	Sex	Not Readily Available	Not Reliable/ Accurate	Reaches Me Too Late	Useless/ Not Important	Too Much Information/ Overload
35. The most prevalent communication problem I must deal with in this agency is:	M	30%	12%	31%	6%	21%
	F	35%	11%	27%	3%	24%

	Sex	Daily	Several Times a Week	Once a Week	Several Times a Month	Once a Month or Less
36. Job-related communication between me and individuals in other agencies occurs:	M	23%	18%	5%	19%	35%
	F	19%	21%	7%	14%	39%

† "Strongly Agree was coded "5" and "Strongly Disagree" was coded "1".
**Significant p<.001

Table 5
Outcome Factors

Question	Sex	% Strongly Agree & Agree	% Neutral/ No Opinion	% Strongly Disagree & Disagree	Mean Score†
24. I have a strong commitment and loyalty to this agency.	M	91%	6%	3%	4.43
	F	88%	9%	3%	4.34
25. I am satisfied with my job performance in this agency.	M	88%	5%	7%	4.17
	F	90%	5%	5%	4.21
26. I am satisfied with my immediate superior.	M	77%	10%	13%	3.93
	F	75%	11%	14%	3.87
27. There is a great deal of teamwork in my work group.	M	79%	10%	11%	3.98
	F	76%	9%	15%	3.88
28. I am satisfied with my chances for promotion and advancement.	M	46%	14%	40%	2.98**
	F	39%	12%	49%	2.79
29. I am satisfied with my participation in decision-making and the possibilities I have to influence matters concerning my job.	M	65%	10%	25%	3.53**
	F	56%	13%	31%	3.30
30. I trust my immediate superior.	M	74%	13%	13%	3.88
	F	71%	12%	17%	3.77

	Sex	% Very High & High	% Average	% Very Low & Low	Mean Score †
32. I would rate my job productivity as:	M	90%	9%	1%	4.25
	F	92%	7%	1%	4.33
33. I think my immediate superior would rate my job productivity as:	M	85%	13%	2%	4.13
	F	85%	14%	1%	4.20
34. The quality of work produced by my work group is:	M	88%	11%	1%	4.20
	F	86%	13%	1%	4.20

† "Strongly Agree" and "Very High" were coded "5" and "Strongly Disagree" and "Very Low" were coded "1".
** Significant p<.001

Table 6
Development Needs

Question	Sex	% Strongly Agree & Agree	% Neutral/ No Opinion	% Strongly Disagree & Disagree	Mean Score†
23. I received sufficient management training for my present job before assuming my job responsibilities.	M	57%	12%	31%	3.33**
	F	49%	13%	38%	3.13

	Sex	% Very Much & Much Improvement	% Some Improvement	% Very Little, Little, or No Improvement	Mean Score†
37. Giving oral presentations.	M	14%	44%	42%	2.60**
	F	24%	43%	33%	2.85
38. Leading group problem-solving meetings.	M	14%	42%	44%	2.57**
	F	25%	43%	32%	2.88
39. Conducting performance appraisal interviews.	M	17%	38%	45%	2.57
	F	19%	40%	41%	2.68
40. Managing conflict between subordinates.	M	18%	35%	47%	2.57**
	F	24%	40%	36%	2.80
41. Writing memos, reports, and letters.	M	11%	30%	59%	2.25
	F	12%	27%	61%	2.27
42. Handling subordinates' complaints.	M	12%	36%	52%	2.43**
	F	17%	37%	46%	2.60

† "Strongly Agree" and "Very Much Improvement" were coded "5" and "Strongly Disagree" and "Very Little Improvement" were coded "1".
** Significant $p<.001$